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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/590,133

08/18/2006

Christina Zech

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BACHMAN & LAPOINTE, P.C.

900 CHAPEL STREET

SUITE 1201

NEW HAVEN, CT 06510

EXAMINER

ALAWADI, SARAH

ART UNIT

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/590,133	<b>Applicant(s)</b> ZECH ET AL.	
	<b>Examiner</b> SARAH AL-AWADI	<b>Art Unit</b> 1619	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 23-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>08/18/2006</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

**Response to Remarks**

Applicant's election without traverse of Group I claims 1-22, and the species of hydroxypropyl cellulose as a part of the thickening system, ethanol and butyleneglycol as an aqueous medium, candelilla wax and bees wax as the structuring agent in the discontinuous phase, glyceryl stearate as the emulsifier, Avalure<sup>®</sup> UR-450 as the film-forming agent, iron oxide as the coloring agent, and air as the gas in the reply filed on 12/29/2009 is acknowledged.

Upon further consideration the Examiner has decided to withdraw the species election requirement.

Currently, claims 1-22 are under Examination.

**Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 8, 10-15, 19, 21, and 22 are rejected under 35 U.S.C. 102(b) as anticipated by Brocks et al. United States Patent Application Publication, 2004/0076651.

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The Examiner interprets a thickening system (continuous phase), gas, and structuring agent in light of the specification (MPEP 2111) to include that of hydroxypropylcellulose, air, and bees wax. Brocks et al. teach cosmetic formulations that are foamed and contain a gas such as air, see abstract and claim 5. The foam composition contains polymers such as hydroxypropylcellulose (thickening agent) and film forming agents such as polyvinylpyrrolidone polymers, see paragraphs 0047-0048. The viscosity of the composition ranges from 1,000 and 100,000 mPa.s, see paragraph 0061. The composition contains an aqueous phase with water and water soluble (hydrophilic) solvents such as butylene glycol, see paragraph 0025. The hydrophobic phase (discontinuous phase) contains oil or wax like substances, see paragraph 0002, 0027-0030. The composition contains surfactants or emulsifying agents such as glyceryl stearate, and waxes such as beeswax (structuring agent), see paragraph 0036 and 0080. Regarding the HLB values, until some material difference(s) in the properties of the composition are demonstrated, said limitation is considered by the Examiner to be directed toward the composition which is instantly claimed thus is considered a property of the emulsifier present. The Examiner interprets the solids content of the film-forming polymer to be a necessary property of the polyvinylpyrrolidone, therefore, until some material difference(s) in the properties of the composition are demonstrated, said limitation is considered by the Examiner to be directed toward the composition which is instantly claimed. Regarding the mean size of the bubbles, Brocks et al. teach that the mean diameter of the bubbles is from 0.2 to 0.4mm, and that the density of the composition is 0.9g/mL, see abstract and paragraph 0009.

Claims 1, 3, 4,12,14,15,18,are rejected under 35 U.S.C. 102(b) as anticipated by Tamarkin et al., United States Patent Application 2005/0069566.

Tamarkin et al. teach foam carrier compositions, see abstract. The Examiner interprets continuous phase, discontinuous phase, gas, thickening system, thickening agent, and structuring agent in light of the specification (MPEP 2111) to include that of hydroxyethyl cellulose (thickening agent) waxes (structuring agents) and polyvinylpyrrolidone (film forming polymers) Tamarkin et al. teach compositions comprising hydroxyethyl cellulose as the gelling (thickening) agent, and polyvinylpyrrolidone (film polymer), see paragraph 0050. The foamable composition is mixed with a gas propellant in an aerosol container, see paragraph 0006. With regards to the dynamic viscosity and the density of the composition; until some material difference(s) in the properties of the composition are demonstrated, said limitation is considered by the Examiner to be directed toward the composition which is instantly claimed thus is considered a property of the composition. The composition contains an aqueous phase comprising water, surfactants, and water soluble ingredients, see paragraph 0195. Solvents such as propylene glycol can be included in the composition, see paragraph 0034 Tamarkin et al. teach that the hydrophobic phase contains oil soluble ingredients, see paragraph 0196. For example, the foamable carrier contains silicone oil, see claim 13. Tamarkin et al. teach that emulsifying surfactants are present in the composition, see paragraphs 0038-0039. The fomable composition further contain coloring agents such as iron oxide, see paragraph 0170.

Claims 1-6, 8, 10-11, 12-15,16, 18-19, and 21-22 are rejected under 35 U.S.C. 102(a) as anticipated by Yu et al. United States Patent Application 2008/0138300 .

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Yu et al. teach cosmetic compositions in the form of an emulsion comprising surfactants such as hydroxypropylcellulose (continuous phase) and an aqueous medium of water and a mixture of hydrophilic solvents, see abstract and paragraphs 0078, 0088 and 0151 and 0251. The composition also contains ethanol and 4-butanediol, also known as butylene glycol, see abstract and paragraphs 0078, 0088 and 0151 and 0251, and waxes such as candelilla wax and beeswax, (discontinuous phase) see paragraph 0191. Surfactants such as, glyceryl stearate (emulsifier), see paragraph 0110 and film-forming polymers such as Avalure UR-450 are included in the composition, see paragraph 0173. The HLB value of the non-ionic surfactants (emulsifier) are equal to 8, see paragraph 103. Pigments such as iron oxide are also present, see paragraph 0226. The composition is pressurized by means of a propellant gas such as an aerosol, see paragraph 0269. The particles of the dispersion have a size of less than ten microns, see paragraph 0235. With regards to the dynamic viscosity and the density of the composition; until some material difference(s) in the properties of the composition are demonstrated, said limitation is considered by the Examiner to be directed toward the composition which is instantly claimed thus is considered a property of the composition. Stabilizers such as hydroxypropylcellulose (thickeners) and polyvinylpyrrolidone (film forming polymer) can be present from a range of 0.2 to 10%, see paragraph 0045.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 7, 9, 17, 20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Brocks et al., United States Patent Application Publication, 2004/0076651 and Tamarkin et al., United States Patent Application 2005/0069566.

The Examiner interprets a thickening system (continuous phase), gas, and structuring agent in light of the specification (MPEP 2111) to include that of hydroxypropylcellulose, air, and bees wax. Brocks et al. teach cosmetic formulations that are foamed and contain a gas such as air, see abstract and claim 5. The foam composition contains polymers such as hydroxypropylcellulose (thickening agent) and film forming agents such as polyvinylpyrrolidone

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polymers, see paragraphs 0047-0048. Brocks et al. teach that the hydroxypropylcellulose (thickening agents) can be present in the composition from about 0.2% to 10% by weight, see paragraph 0045. The hydrophobic phase (oils and waxes) is present from 5% to 30% weight, see paragraph 0029 and 0032. With regards to the amount of thickening agent present, the amount of wax and oil in the oil phase, amount of the film forming agent, and presence of the gas, it would have been prima facie obvious for a person having ordinary skill in the art to routinely optimize the amount of each parameter in the composition and adjust the volume of each parameter in the composition, furthermore MPEP 2144.05 recites “where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine optimization.”

Brocks et al. does not expressly teach wherein the emulsifier has an HLB value of 3 to 8, or wherein a coloring agent is present in the composition.

Tamarakin et al. teaches foam compositions with surfactants and gelling agents (thickeners) which are used for cosmetic purposes, see abstract. The surfactants are used as emulsifiers, and contain HLB values that are variable between 1 to 20, see paragraph 0039. Tamarakin further teaches that the lower the HLB value, the more lipophilic the surfactant is, and that lipophilic emulsions (lower HLB values) form water in oil emulsions, see paragraph 0039. Thus it would have been prima facie obvious to the skilled artisan to adjust the balance depending on the desired type of emulsion. Tamarakin further teaches that additives such as coloring agents, are commonly used in the skin care industry, see paragraph 0152.

It would have been prima facie obvious to one of ordinary skill in the art to adjust the HLB value of the emulsifier taught by Brocks et al.(glyceryl stearate), and to include pigments



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into the composition of Brocks. One would have been motivated to do so because Brocks et al. teach that HLB is an adjustable factor and that the lower the value the more lipophilic the composition is for an ideal water in oil emulsion. Furthermore, Brocks et al. teach that pigments are common additives to cosmetic formulations. There would have been a reasonable expectation of success because both Brocks et al. and Tamarkin et al. are directed towards foamed cosmetic compositions which contain hydrophobic and hydrophilic phases.

Claims 2, 7, 9, 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yu et al. United States Patent Application 2008/0138300 and Hahn et al., United States Patent Application 2003/0031727.

As discussed above, Yu et al. teach cosmetic compositions in the form of an emulsion comprising surfactants such as hydroxypropylcellulose (continuous phase) and an aqueous medium of water and a mixture of hydrophilic solvents, see abstract and paragraphs 0078, 0088 and 0151 and 0251. The composition also contains ethanol and 4-butanediol, also known as butylene glycol, see abstract and paragraphs 0078, 0088 and 0151 and 0251, and waxes such as candelilla wax and beeswax, (discontinuous phase) see paragraph 0191. Surfactants such as, glyceryl stearate (emulsifier), see paragraph 0110 and film-forming polymers such as Avalure UR-450 are included in the composition, see paragraph 0173. The composition is pressurized by means of a propellant gas such as an aerosol, see paragraph 0269. With regards to the percentage of hydroxypropylmethylcellulose (thickening agent), Yu et al. teach that such thickening or gelling agents are present ranging from 0.05 to 40% by weight, see paragraph

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0101. With regards to the percentage of wax present in the composition, Yu et al. teach between .1 and 50% by weight of waxes are present and the fatty substance may be present from 0.01 to 60% by weight of the composition, see paragraph 0222. Regarding the percentage of the solids content of the film forming polymers, Yu et al. teach that film forming polymers are present in a solids content ranging from 0.1% to 60% by weight, see paragraph 0184 and 0173. Yu et al. further teach that the film-forming agents can be present in the composition at 0.08%, see column 0273. It would have been prima facie obvious to one of ordinary skill in the art to routinely optimize the ratios of the thickening system, waxes, oils, and the film-forming agent as the values of each parameter with respect to the claimed composition are adjustable and Yu et al. teaches varying ranges. Furthermore, MPEP 2144.05 recites ““where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine optimization.”

Yu et al. does not expressly teach wherein the viscosity of the preparation ranges from 1 to 10,000 mPa.s or more preferably from 1 to 3,500 mPa.s.

Hanh et al. teach cosmetic formulations such as creams, lotions, or gels, paragraphs 0003 and 066. Hahn et al. teach that the viscosity of the emulsion can be controlled and regulated based on the addition of the emulsifiers, see paragraph 0067 and 0069.

It would have been prima facie obvious to one of ordinary skill in the art to adjust the viscosity of the cosmetic composition taught by Vu et al. One of ordinary skill in the art would have been motivated to adjust the viscosity of the preparation, particularly in view of Hahn et al. which teach that the viscosity of an emulsion system is easily optimized. For Example, Hahn et al. teach by varying the ratio of the emulsifiers (glycerl stearate) the viscosity of the emulsion

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can be controlled and regulated to provide stability, see paragraph 015. There would have been a reasonable expectation of success to adjust the viscosity because both applications contain emulsifiers within emulsions which are used for cosmetic purposes.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yu et al. United States Patent Application 2008/0138300 and Baumeister et al., United States Patent Application 2005/0222001.

With regards to claim 22, Yu et al. does not expressly teach wherein the density of the composition has a density in the range of 0.7 to 0.9.

Baumeister et al. teach foamed compositions with an inert gas which contain a low density of 0.8g/cm<sup>2</sup>, see abstract. The reduced density permits improved distributability in cosmetic products such as waxes, gels, or creams, see paragraph 0018.

It would have been prima facie obvious for one of ordinary skill in the art at the time the invention was made to adjust the density of the cosmetic composition taught by Yu et al. One would have been motivated to do so because it is taught that density is a variable that can be optimized, see paragraph 0105 of Baumeister et al. Furthermore Baumeister et al. teach the advantages of containing low density cosmetic formulations, and disclose that low density cosmetic compositions have a light, soft feel and are distributed more easily, see paragraph 0110 through 0115. There would have been a reasonable expectation of success because both Yu et al. and Baumeister et al. teach cosmetic compositions with a hydrophobic and hydrophilic phase, and that the composition contains emulsifiers, thickening substances, and surfactant.

*Correspondence*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah Al-Awadi whose telephone number is (571) 270-7678. The examiner can normally be reached on 9:30 am - 6:00 pm; M-F (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bonnie Eyer can be reached on (571) 272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SARAH AL-AWADI/  
Examiner, Art Unit 1619

/Shanon A. Foley/  
Primary Examiner, Art Unit 1619